

EMOTIONAL DISORDERS IN THE RETARDED

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In the past, emotional disturbances in the retarded were a frequent cause of institutionalization. For example, a study of emotional disturbance in a sample of institutionalized children with Down's syndrome noted that whereas only 37% of the total sample were emotionally disturbed at the time of the study, 56% had displayed significant symptoms of an emotional disturbance at the time of their initial admission to the institution (Menolascino, 1967). One might ask why most of these people who were emotionally upset were sent to an institution for the retarded rather than to a mental health facility. Institutions for the retarded have traditionally employed a meager cadre of mental health professionals, so that admission of the disturbed retarded citizen has often been a life sentence to institutional care, although a brief period of inpatient or outpatient psychiatric care, coupled with revised expectations and increased support in the community, could frequently have prevented institutionalization (Menolascino, 1977).

When compared with the incidence of emotional illness in the general population, the retarded are only slightly more at risk. Early prevalence studies (pre-1960) were accomplished primarily

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in institutional or hospital settings. The frequency rates reported ranged from 16% to 40% (Jervis, 1959; Kanner, 1948). These studies focused on institutionalized individuals in the mildly retarded range.

A series of reports on mentally retarded persons living with their primary families or in their primary community at the time of study have appeared during the last 15 to 20 years. These studies, especially those focusing on retarded children under the age of 12 years, have rather consistently reported a 20% to 35% frequency of emotional disturbances (Chess, 1970; Menolascino & Bernstein, 1970; Phillips & Williams, 1975). These findings are especially important when one notes that scientific population studies on mental illness in adults suggest that the incidence of emotional disturbance in the general population approaches 40%.

Lastly, in view of the growing trend toward community-based care of the retarded, there is an increasing need to train all mental health professionals in the treatment of emotionally disturbed retarded persons.

Types of Emotional Disorders in the Mentally Retarded

In the broadest sense, we find that the mentally retarded can fall prey to essentially the same types of emotional illness that befall people of normal intellectual ability. Therefore, one can note in the retarded the full range of psychoses, neuroses, personality disorders, behavior disorders, psychophysiologic disorders, and transient situational disturbances that are noted in the "normal" population (Webster, 1970).

In community-based psychiatric programs that treat the retarded (i.e., community mental health centers), it is not unusual to note combined diagnoses such as childhood schizophrenia and moderate mental retardation, or unsocialized aggressive reaction of adolescence and mild mental retardation. Practically speaking, certain diagnostic categories such as the neuroses tend to be underrepresented in the retarded, while others are seen with relative frequency (e.g., schizophrenia, the various behavioral reactions, and transient situational disturbances). The diagnostic entities that are seen most frequently or that present special problems of diagnosis are described in the following sections.

Childhood Psychoses and Mental Retardation

Psychotic reactions of childhood have presented a major challenge to the clinician since their distinct recognition by DeSanctis in 1906. Delineation of types and etiologies has been delayed, in part, by the fact that the psychotic child frequently functions at a mentally retarded level, and early observers believed that all psychotic children "deteriorated."

In 1943, "early infantile autism" was described, and became the focus of much interest, including speculation as to whether it represented the earliest form of childhood schizophrenia (Kanner, 1943). The term "autism" is frequently employed in the differential diagnosis of severe emotional disturbances in infancy and early childhood. Yet, to label a child "autistic" presents some formidable problems with regard to definition of the term, specific etiological-diagnostic implications, and treatment considerations for the child so designated (Ornitz & Ritvo, 1976). All too often the word is used as if it were a diagnosis, a synonym of childhood schizophrenia, or an abbreviation for early infantile autism. Such usage obviously is imprecise and contributes further to the diagnostic confusion that has abounded in the literature concerning childhood psychosis.

Interestingly, today there is not the amount of fervor over diagnosis, treatment, and differential outcome concerning the functional childhood psychoses and their interrelationships to mental retardation that there was 10-15 years ago. A number of follow-up studies (Menolascino & Eaton, 1967), coupled with the literal rediscovery of the wide variety of primitive behavioral repertoires in the retarded (the same behavior that has been termed "psychotic" in the past!) and a lack of relative differences in treatment modalities and corresponding responses to them, have all tended to mute this earlier clinical fervor. For example, an excellent review of the past relationships between emotional disturbance and mental retardation by Garfield & Shakespeare (1964) addressed almost a third of its content to the relationships between emotional disturbance and mental retardation. Indeed, as Creak (1963) and Penrose (1966) have noted, the most common challenge in this relationship is to ascertain not whether the patient is retarded or psychotic, but how much of his condition is

attributable to retardation and how much to psychosis.

Earlier it was noted that the psychoses of childhood brought much fervor to the study of the interrelationships between mental retardation and psychoses of childhood. Now, in the 1970s, the issue has been clarified, and it is becoming apparent that the number of functional etiologies of infantile autism and childhood schizophrenia is quite limited in scope. The reported findings of central nervous system pathology in the psychoses of childhood are the most frequent trend noted in the past ten years (Bialer, 1970; Menolascino, 1965; Menolascino & Eaton, 1967; Rimland, 1964; Robinson & Robinson, 1965; Rutter, 1965; Rutter, Graham, & Yule, 1970; Wing, 1966).

In summary, the clinical reports of the last decade have shown rather clearly that:

1. The psychoses of childhood, particularly autism, are strongly associated with dysfunction of the central nervous system.
2. The appearance of psychotic behavior (and/or autistic behavior) and mental retardation in young, nonverbal children speaks both common etiology and a diminished capacity to tolerate stress.
3. Retarded patients may show stereotyped, self-stimulating behavior that resembles autism.
4. Relief of the psychotic condition in "autistic" children far more commonly results in a retarded child who is able to interact with others than in a child of normal intelligence.

Personality Disorders

Personality disorders are characterized by chronically maladaptive patterns of behavior (e.g., antisocial personality, passive-aggressive personality, etc.), which are qualitatively different from psychotic or neurotic disorders (American Psychiatric Association, 1968). Studies reported in the earlier history of retardation tended indiscriminately to see antisocial behavior as an expected behavioral accompaniment of mental retardation. Indeed, the much discussed earlier reports on the relationship between retardation and personality disorders — especially the antisocial personality — were couched in moralistic-legal terms rather than based on definitive, descriptive criteria (Barr, 1904).

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The antisocial personality designation (formerly viewed as the sociopathic personality) continues to receive much attention. This is a diagnosis that is frequently overrepresented in borderline and mildly retarded individuals. It would appear that behavioral problems of an antisocial nature are more frequently seen in this group, for a variety of reasons. The same poverty of interpersonal relationships during childhood that leads to retardation associated with psychosocial deprivation can also lead to impaired object relations and poorly internalized controls. Also, the diminished coping skills of this group often necessitate their performing deviant acts simply to exist. Finally, this group is most likely to be released from institutional settings in young adulthood and to illustrate graphically the effects of institutional detachment on personality structure.

It is interesting to note that other personality disorders (e.g., schizoid personality) have been reported only rarely in the retarded. Indeed, the only other personality disorder in the retarded that has received much attention is the "inadequate personality," even though the application of exact diagnostic criteria would exclude this disorder as a primary diagnosis in mental retardation. For example, the current description of this personality disorder as a primary diagnosis states: "This behavior pattern is characterized by ineffectual responses to emotional, social, intellectual and physical demands. While the patient seems neither physically nor mentally deficient, he does manifest inadaptability, ineptness, poor judgment, social instability, and lack of physical and emotional stamina" (American Psychiatric Association, 1968. P. 44). Unfortunately, this diagnostic statement, unless correctly applied, leaves much room for examiner bias and value judgments.

Although personality disorders do occur in the mentally retarded, they are based primarily on extrinsic factors, have no distinct etiological relationships to mental retardation, and, despite persistent folklore, are not abnormally frequent in the non-institutionalized retarded population.

Psychoneurotic Disorders

There is a paucity of older literature (pre-1950) on the fre-

quency and types of psychoneurotic reactions in the mentally retarded. Early reviews on this type of emotional disturbance in the retarded suggested that their frequency was quite low (Beier, 1964; Garfield & Shakespeare, 1964; Menolascino, 1967; Robinson & Robinson, 1965), and the types of psychoneurosis reported were few in number (e.g., anxiety reactions — Menolascino, 1965; phobic reactions — Webster, 1970; and depressive reactions — Gardner, 1971).

Recent studies (Chess, 1970; Webster, 1970; Woodward, Jaffe, & Brown, 1970) dispute the concept of incompatibility between neurosis and retardation. It appears that much of what was previously considered "expected behavior" in the retarded has, on closer study, been noted to be quite similar to emotional disturbance in the nonretarded.

Each of the cited studies is quite explicit with respect to diagnostic criteria and attributes the neurotic phenomena to factors associated with atypical developmental patterns in conjunction with disturbed family functioning. For example, the above-noted recent reports of psychoneurotic disorders in retarded children have clearly linked symptoms (e.g., anxiety, fear of failure, insecurity, etc.) to exogenous factors such as chronic frustration, unrealistic family expectations, deprivations, etc. Interestingly, each of these reports suggests that psychoneurotic disorders are more common in children of the high-moderate and mild ranges of mental retardation. This finding has prompted speculation as to whether the relative complexity of psychoneurotic transactions is beyond the adaptive limits of the severely retarded (Webster, 1970).

Transient Situational Disturbances

Although this rather large category of minor emotional disturbances is perhaps overutilized in the assessment of the nonretarded, it is employed only rarely during clinical assessment of emotional disturbances in the retarded population. We think that this underutilization is one of the major drawbacks of descriptive approaches to the retarded.

The Diagnostic and statistical manual of mental disorders

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(DSM-II) of the American Psychiatric Association (1968) defines transient situational disturbances as a "category reserved for more or less transient disorders of any severity (including those of psychotic proportions) that occur in individuals without any apparent underlying mental disorders and that represent an acute reaction to overwhelming environmental stress. If the patient has good adaptive capacity, his symptoms usually recede as the stress diminishes..." (P. 48).

The reader will note that the transient nature of these disorders is their paramount feature. The sentence "If the patient has good adaptive capacity, his symptoms usually recede as the stress diminishes" poses a recurrent dilemma when one works with a retarded population. If the clinician thinks that retarded people have poor adaptive capacities and therefore expects little resolution, treatment intervention is then less than energetic, and other diagnostic categories are often utilized. Furthermore, if the mentally retarded are considered prone to emotional disturbances, "transient" is then viewed as the beginning of a chronic emotional disturbance that has emerged to accompany the retardation.

In our experience a great number of emotional and behavioral problems in the retarded are transient in that they are frequently caused by inappropriate expectations or rapid changes in life patterns, and they do often respond rapidly to environmental adjustments. Even though it is not possible to use the transient situational diagnosis if one follows the letter of the guideline for DSM-II, it is hoped that professionals will conceptualize disorders in the retarded in this manner when it is appropriate.

Hyperactivity

Hyperkinetic reactions are classed as "behavioral" in DSM-II.

There is increasing evidence that hyperactivity is a symptom of multiple etiologies (Donaldson, 1975). It may be due to difficulty concentrating on external events in the psychotic child; to lack of cortical inhibition in a child with classical hyperkinesis associated with minimal brain dysfunction; to tension release in the anxious child; to increased irritability in the allergic or food-additive-sensitive child; or to defiance of authority in the unsocialized child. The retarded child may suffer from any of these

conditions and be at additional risk because of his own problems of central nervous system immaturity, short attention-span for age, and frequently limited ego strength.

Satisfactory treatment of the "hyperactivity" depends on proper identification of the underlying cause, and the presence of retardation should not cause the clinician to discount the other possible etiologies.

Problems Associated with Different Levels of Retardation

The Severely Retarded

This group is characterized by gross central nervous system impairment, multiple physical signs and symptoms, and a high frequency of multiple handicaps (in particular, special sensory and seizure disorders). Such severe problems directly impair these people's ability to assess and effectively participate in ongoing interpersonal-social transactions. Clinically, these patients manifest primitive behaviors and gross delays in their developmental repertoires. Primitive behaviors include very rudimentary utilization of special sensory modalities, with particular reference to touch, position sense, oral explorative activity, and minimal externally directed verbalizations. In the diagnostic interview one notes much mouthing and licking of toys and excessive tactile stimulation (e.g., "autistic" hand movements executed near the eyes, and skin-picking and body rocking).

From a diagnostic viewpoint, the very primitiveness of the severely retarded person's overall behavior, in conjunction with much stereotyping and negativism, may be misleading. For example, when under minimal stress in an interpersonal setting, mentally retarded children frequently exhibit negativism and out-of-contact behavior, and this behavioral response may initially suggest a psychotic disorder of childhood. However, these children do make eye contact, and will interact with the examiner quite readily, despite their very minimal behavioral repertoire. Similarly, one might form the initial impression that both the level of observed primitive behavior and its persistence are secondary to extrinsic deprivation factors (a functional disorder); however, these children never seem to possess a functional ego at the ap-

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appropriate chronological age, and there is an amorphic (or minimal) personality structure. The previously noted at-risk characteristics tend to appear against the backdrop of this amorphic personality.

Recent studies by Chess, Korn, & Fernandez (1971) on severely retarded children with the rubella syndrome, and by Grunwald (1974) on the multiply handicapped-severely retarded, clearly document the high vulnerability of these children to psychiatric disorders. It has been noted that without active and persistent interpersonal, special sensory, and educational stimulation (including active support of the parents), these youngsters fail to develop any meaningful contact with reality; they display "organic autism."

We have been impressed by the extent of personality development the severely retarded can attain if early and energetic behavioral, educational, and family counseling interventions are initiated and maintained. True, they remain severely handicapped in their cognitive and social-adaptive characteristics; but there is a world of difference between the severely retarded child with many self-help skills who graduates from a standing table to a wheelchair and the untrained, severely retarded one who tries to withdraw from, or is aloof to, interpersonal contacts and who is totally lacking in self-help skills. Even in adequately managed, severely retarded children, paucity of language evolution is a source of great vulnerability and blocks growth toward more complex personality development. Interestingly, these youngsters tend to be accepted by their parental support systems and peer groups (if adequate evaluations and anticipatory counseling are accomplished), perhaps reflecting empathy for the obvious handicaps they display.

The Moderately Retarded

This level of retardation encompasses some of the same etiological dimensions noted above, accompanied by a wide variety and high frequency of associated handicaps. The children's slow rate of development and their specific problems with language elaboration and concrete approaches to problem-solving situations present both unique and marked vulnerabilities for adequate personality development.

In an outstanding study, Webster (1970) viewed these personality vulnerabilities as stemming from the characteristic postures moderately retarded children tend to use in their interpersonal transactions, more autism (selective isolation), inflexibility and repetitiousness, passivity, and a simplicity of emotional life. This simplicity of emotional life, a cardinal characteristic of the moderately retarded, reflects their undifferentiated ego structures and poses a clinical challenge in attempting to modulate their tendency toward direct expression of basic feelings and wants, as noted in their obstinacy, difficulties in parallel play situations, and so on.

Here again, the high frequency of special sensory and integrative disorders seriously hampers these children's approach to problem-solving, which makes them more likely to develop atypical or abnormal behaviors in a variety of educational or social settings. The limited repertoire of personality defenses coupled with their concrete approaches tends to be fertile ground for overreaction to minimal stresses in the external world. Prone-ness to hyperactivity and impulsivity, rapid mood swings, and temporary regression to primitive self-stimulatory activities are characteristic of their fragile personality structures. Limitations in language development further hamper their ability to fully communicate their inter/intrapersonal distress.

Unlike the severely retarded, this group of youngsters tends to be rejected by their parents and peers. Their significant attempts to approximate developmental expectations, coupled with the above-noted behavioral traits, appear to alienate them from those very interpersonal contacts they so desperately need.

The Mildly Retarded

Recently there has been confusion over whether to view the mildly retarded as the statistical expression of the polygenic basis of the symptom of mental retardation or as the untutored "have-nots" of a society that tolerates only minor deviations from the norm (Eisenberg, 1972). Emotional disturbances in the mildly retarded reflect the well-known residuals of a person who is labeled deviant and then becomes caught in the dynamic interplay of disturbed family transactions. The typical delay in establishing

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that these youngsters have a distinct learning disability (usually not confirmed until six to nine years of age) presents the mildly retarded individual with a constant source of anxiety in his inability to integrate the normal developmental sequences at the appropriate time in his life. Usually, during the latent period of psychosexual personality integration, mildly retarded children have considerable difficulty in understanding the symbolic abstractions of schoolwork and the complexities of social-adaptive expectations from both family and peer group. Often at this stage they gain some insight into their limitations and, by early adolescence, have established an identity that incorporates both retardation and deviance.

The vulnerabilities of the mildly retarded often are not buffered or redirected by loved ones into new interpersonal coping styles to help correct earlier misconceptions about the self. Without some source of community support and direction, the mildly retarded are at high risk for failure in society — especially urban society. In the past, if they managed to avoid an institutional setting for the retarded, it was not unusual to find them, eventually, in other types of institutions, such as correctional facilities or state-supported psychiatric hospitals.

In sum, it appears that this group is very likely not to be readily identified as handicapped to the extent of needing support. Rather, they are seen as society's misfits who, if not simply ridiculed, are apt to be taken advantage of in far more serious ways, because of their lack of coping skills.

Psychiatric Problems Associated with Different Models of Care

Another way to conceptualize the problems of the retarded, in addition to types of emotional disturbance and levels of retardation, is according to the problems that appear to be related to different models of care.

Providing optimal care for the retarded at home, in the community, or in an institutional setting is extremely difficult. There is no such thing as an "average" retarded child. In a general way, they can be grouped by overall abilities; but one of the most striking things about the retarded is the great variation of abilities

often seen within each of these people. This variability, plus the great difficulty the caregivers are likely to have in fully understanding the individual retarded person's abilities and disabilities, appears to be the basis of a number of the psychiatric problems seen in the retarded. The most common type of error in the care of the retarded involves the caregiver's expecting either too little or too much from the retarded person. Errors in either direction appear to be the cause of a great many of the psychiatric problems seen in the retarded.

Too Few Expectations

Too few expectations, combined with too little effort on the part of the care providers, was seen in most of institutionalized retarded of previous decades. These children tended to show a pattern of underachievement and a detachment syndrome that are typical of people reared in barren institutional environments. One common problem characteristic of these children was a profound and often indiscriminately expressed affect hunger. Because these children, particularly the moderately or mildly retarded, had often had no experience with significant or meaningful object relations and were accustomed to living their lives amidst large numbers of minimally involved people, their indiscriminate approach to strangers was a serious problem. This lack of "social sense" was often cited not only as a part of the syndrome of retardation but also as a reason for continued institutionalization. Another variant of this detachment syndrome was more often seen in the severely retarded. Instead of indiscriminate approach behavior, this group often withdrew into themselves to develop a pattern of primitive, self-stimulating behaviors that were easily confused with the stereotypic behaviors seen in infantile autism.

Another variant is the situation in which the caretaker actually does too much instead of too little — an overprotective model. Before the advent of community-based programs, parents who were faced with the singular unhappy choice of sending their child to an institution sometimes felt that the only acceptable solution was to keep the child at home. All too often this was in an isolated part of the home away from the bulk of family or external social contacts. Here, the devoted mother tended to the child's every

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need and in doing so increased his dependence and almost totally eliminated any capability for developing effective social-adaptive functions. This caused serious problems when the child's physical maturation or the parents' advancing years made home care no longer possible.

When the detached mildly or moderately retarded person is "at risk" of becoming the counterpart of a person of normal intelligence with a character disorder, the overprotected retarded person is likely to show symptoms of inflexibility, autistic thinking, and situational anxiety. This second group may also tend to display stereotyped behavior as a pattern of self-stimulation. As might be expected, the detached, previously institutionalized child is likely to manifest active but indiscriminate behavior in community placement efforts, whereas the older child with a history of overprotective isolation is more apt to respond with anxiety and anger to the social and self-help demands of the community or institutional placement that must eventually come.

Excessive Expectations

At the other end of the spectrum we see children and young adults who show evidence of caretakers' having expected too much from them. One of the most common problems in very young, moderately retarded children who do not have physical stigmata is a failure by the parents to recognize their intellectual limitations before the normal time for language acquisition. It would appear that one common cause of autistic-like psychoses is the placement of a sensitive, intelligent-appearing, but nevertheless retarded child in a situation in which his conscientious parents are doing all the "right" things during the second year of life to facilitate language skills. Verbal demands such as "What's that?," "Say ball," "Say Mama," etc., often cause the moderately retarded child with a language disability to react with increasing anxiety and a variety of avoidance behaviors that reflect the lack of pleasure he finds in verbal interactions. We have seen a number of these children who, when detected early, were able to give up their autistic behavior as ways were found to relate to them that did not depend on verbal productions.

Similar examples of excessive expectations are occasionally

seen in innovative institutional or community programs in which children who are more severely retarded may be involved in too intense efforts to maximize their capabilities. In some cases this has resulted in more frequent seizures, and in others we have noted a pattern of autistic withdrawal quite similar to that noted above.

One of the most distressing problems with older children in this group is outbursts of violent behavior when excessive expectations have been maintained for too long. All too often such children are placed on high doses of medication in an effort to control aggression that is actually reactive in nature and not a symptom of psychosis.

Recommendations Regarding the Prevention and Treatment of Emotional Disorders in the Retarded

Comprehensive Approach to Treatment

The basic principles of a comprehensive-treatment approach to mentally retarded children with associated emotional disturbances include:

1. Keep an open-minded approach in diagnosis and treatment; reevaluate with the same inquiring attitude.
2. Engage the family in active participation in the treatment.
3. Early descriptive diagnosis followed by early treatment is essential.
4. Begin with acceptance of each child as he is, including all aspects of his behavior. Equal acceptance of his family is needed.
5. Focus on what the child can do. Lead him step by step toward maximal development.
6. Coordinate the services needed for the child. Clarity and continuity of communication among the various services are of prime importance.

1. Open-minded approach

The diagnosis and treatment of children who are both mentally retarded and emotionally disturbed necessitate an open-minded approach. This is the first basic principle for the clinician who

plans treatment for these youngsters, and it is important to maintain this approach throughout treatment. Periodic reevaluation often reveals developmental surprises that underscore the need for a flexible diagnostic -prognostic attitude.

2. Active family participation

The second principle in planning treatment for children with both mental retardation and emotional disturbance is to engage the family in active participation as early as possible. The family is the key to any effective treatment program. The clinician's attitudes and level of interest frequently determine the success of this endeavor; thus, future cooperation (or lack of it) may reflect his unspoken, as well as spoken, attitudes at the time of initial contact. The therapist needs to convey to the family his willingness to share with its members the facts he learns, not as an end point, but as part of the first step in treatment. Treatment plans become a cooperative process that parents and clinician work out over the course of time.

It is valuable to indicate in an early contact that treatment planning rarely results in a single recommendation; it is something that may shift in focus and alter its course as the child grows and develops. Diagnostic and treatment flexibility in the early stages helps develop the clinician, who does view the total child and refer to other special sources of help as indicated. This forestalls the "doctor-shopping" that often occurs secondary to a referral concerning some special allied problem.

Much has been written about the grief reactions of families with handicapped children. Such a reaction frequently occurs in parents of mentally retarded children. Alertness to this grief reaction must be retained by clinicians evaluating these children and must not be forgotten at the time of interpretation to parents or in subsequent interviews.

Assessment of family interaction and strengths is a necessary part of the total evaluation, since these assets are essential to planning a comprehensive treatment program. Conversely, some of the family psychopathology encountered serves to reactivate the difficulties with the child in question. Several interviews may be necessary to determine the nature of family transactions with the handicapped child.

3. Early diagnosis and treatment

A third principle of the comprehensive treatment approach is early descriptive diagnosis and early treatment. This includes clarification not only of what needs treatment but also of what can and what cannot be actively treated. Full discussion of therapeutic goals can assist families in establishing realistic treatment expectations so that mutual frustration is reduced and fewer secondary psychiatric problems are encountered. In this sense, prevention becomes a cohesive part of the ongoing work with the child and his family. This total approach requires continued follow-up of the patient. Periodic reevaluations must be done, and appropriate shifts in treatment and overall levels of expectation carried out.

4. Initial contact

The fourth principle is to accept each child as he is at the time of initial contact. He needs acceptance for what he is, not what he might have been without his problem or if therapy had been undertaken sooner. A corollary of this principle is awareness of the family's feelings and acceptance of them as they are at that moment. Increasing the parents' guilt feelings is rarely, if ever, desirable in attempting to motivate them toward therapy.

5. Maximization of developmental potential

The fifth principle involves focusing on the maximization of developmental potential. It involves a different type of goal setting from the usual treatment expectation, since the focus often must be on what the child can do rather than anticipation of a cure. The goal then becomes one of trying to provide the child with the necessary opportunity and support to develop maximally with a minimum of obstacles.

6. Coordination of services

The sixth principle is to coordinate the services needed for the child. This requires awareness of the various services available

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in a given community and an attitude that permits collaboration. It necessitates sharing the overall treatment plan with the child (when appropriate), with the family, and with community resources, with special emphasis on the child's teacher. Close attention to clarity and continuity of communication among the various services is essential.

Services that emotionally disturbed-mentally retarded children may need range from psychotherapy, in selected instances, through many types of specialized medical care, to special education. Psychopharmacologic adjuncts to modify overt behavioral manifestations may be useful in some instances, and will be discussed in the following section.

Emotionally disturbed-mentally retarded children are different from other retarded children. Some of these differences are subtle and perplexing to parents. Parental reaction frequently causes the child to realize he is different, but does not tell him in what way he is different or what he can do about it. A feeling of estrangement may ensue. If the child already perceives the world in a somewhat distorted way, this so weakens his grip on reality that it blocks his normal avenues of learning and reality-testing. Increased disorganization of behavior to the point of psychosis may occur.

Psychopharmacologic adjuncts to treatment

The medications used in psychiatry have one common route of therapeutic intervention in that they all affect neurotransmitter activity in some way. Tranquilizers tend to block neurotransmitter activity, whereas stimulants and antidepressants tend to enhance the activity of certain neurotransmitters. As a result of experience with these various drugs over the past 20 to 40 years, plus more recent studies regarding the metabolism of neurotransmitters in various comparative psychiatric conditions (Murphy & Wyatt, 1972; Rosenblatt, Leighton, & Chanley, 1973; Wise & Stein, 1973), psychiatry has developed an increasing consensus regarding the probable neurotransmitter abnormality in certain psychiatric conditions (Snyder, Banerjee, Yamamura, & Greenberg, 1974).

If the clinician is able to correlate the probable neurotransmitter abnormality in a given psychiatric condition with the ap-

PSYCHOTROPIC MEDICATIONS FOR CHILDREN

Drug	Daily dose (mg)	Indication	Apparent action	Potential problems
Dextroamphetamine (Dexadrine)	5-20	Stimulus-bound hyperactivity in MBD when physiologic signs of anxiety are not present	Mimic or release norepinephrine	Decreased appetite, decreased growth, increased anxiety, increased aggression in anxious children
Methylphenidate (Ritalin)	10-40	Stimulus-bound hyperactivity in MBD when physiologic signs of anxiety are not present	Mimic or release norepinephrine	Decreased appetite, decreased growth, increased anxiety, increased aggression in anxious children
Imipramine (Tofranil)	10-75	Hyperactivity as above, some types of detachment, enuresis, night terrors	Increased brain norepinephrine++, block acetylcholine+, decreased stage-IV sleep	Anticholinergic side effects, increased anxiety, nightmares, aggression in anxious children; may unmask latent schizophrenia
Chlorpromazine (Thorazine)	10-300	Anxiety associated with aggression and/or psychosis	Block norepinephrine++, dopamine+	Photosensitivity, leukopenia — occasional extrapyramidal side effects, tissue deposition
Thioridazine (Mellaril)	10-300	Anxiety associated with aggression and/or psychosis	Block norepinephrine++ and dopamine+, block acetylcholine+	Headache, depression, weight gain, extrapyramidal side effects, tissue deposition, not antipsychotic in low doses
Trifluoperazine (Stelazine)	1-10	Anxiety with withdrawal and compulsive features and/or psychosis	Block norepinephrine+ and dopamine++	Extrapyramidal side effects, leukopenia, increased aggressiveness or hyperactivity in some patients with MBD
Pluphenazine (Prolixin)	1-10	Anxiety with withdrawal and compulsive features and/or psychosis (This drug is also available in a long-acting injectable form.)	Block norepinephrine+ and dopamine++	Extrapyramidal side effects, leukopenia, increased aggressiveness or hyperactivity in some patients with MBD

Haloperidol (Haldol)	0.5-1.5	Organicity with psychosis and ritualistic or stereotyped behavior	Block dopamine++, block norepinephrine+	Not cleared by FDA for children under 12, severe extrapyramidal symptoms
Hydroxazine (Atarax; Vistaril)	30-75	Anxiety, psychophysiologic disorders, allergy	Antihistamine+, sedative++	Some decreased effectiveness over time. Inadequate for more severe conditions
Diphenhydramine (Benadryl)	25-300	Hyperactivity secondary to anxiety and allergies	Antihistamine++, sedative+	Drowsiness, some anticholinergic effects; may worsen classic hyperkinesia
Diazepam (Valium)	4-14	Situational anxiety, status epilepticus	Thought to increase competitive inhibitors of norepinephrine (i.e., GABA) or to block central acetylcholine	Impairment of recent memory, increased aggression in some children, potential for dependence
Chlordiazepoxide (Librium)	10-40	Situational anxiety	Same as above	Same as Valium except less problem with recent memory
Phenobarbital	30-240	For grand mal and petit mal epilepsy, situational anxiety	Sedative, anticonvulsant	Aggressive or hyperactive behavior in some children, especially those with MBD, recent memory loss; potentially addictive
Primidone (Mysoline)	250-750	Grand mal and psychomotor epilepsy	Anticonvulsant	Metabolized to phenobarbital, ataxia, drowsiness, worsened hyperactivity or aggressiveness in children with MBD
Diphenylhydantoin sodium (Dilantin)	5 mg/kg, up to 300 mg in preadolescent	Grand mal epilepsy, phenobarbital intolerance	Anticonvulsant	Leukopenia, gingival hypertrophy, skin rash
Ethosuximide	250-750	Petit mal epilepsy, phenobarbital intolerance	Anticonvulsant	Blood dyscrasias, allergic reactions, drowsiness

appropriate pharmacologic action of a particular psychoactive drug, he will have a high probability of selecting the appropriate medication. It appears that children without physiologic signs of anxiety who present with impulsive hyperactivity tend to be catecholamine deficient and are likely to respond to stimulant or antidepressant medication (Donaldson, 1975). Similarly, intensely anxious, hyperalert children tend to have high norepinephrine levels and therefore respond well to the more sedative phenothiazines, and children with stereotyped, ritualistic behavior appear to have high dopamine levels and tend to respond best to the more potent antipsychotic medications. The accompanying chart correlates medication and symptoms in more detail.

Summary

Retarded people are subject to essentially the same types of psychiatric illnesses as the general population. Because of their tendency toward central nervous system impairment and diminished overall coping ability, they present somewhat greater than average risks for psychosis, behavioral disturbances, and transient situational disturbances.

As with other groups of dependent psychiatric patients, i.e., child or geriatric, the clinician's efforts must frequently be directed as much toward assessing the strengths and weaknesses of the family and community support systems as they are toward care of the individual patient.

Many retarded people are institutionalized unnecessarily because of acute emotional problems. In nearly all cases the retarded can be maintained in the community, with the help of psychiatrists who are willing to provide short-term and supportive care for them.

REFERENCES

- American Psychiatric Association (1968) Diagnostic and statistical manual of mental disorders. Washington, D.C.: American Psychiatric Association.
- Barr, M. W. (1904) Mental defectives, their history, treatment and training. Philadelphia: P. Blakiston.

EMOTIONAL DISORDERS

- Beier, D. C. (1964) Behavioral disturbances in the mentally retarded. In H. A. Stevens & R. Heber (Eds.), Mental retardation: A review of research. Chicago: University of Chicago Press.
- Bialer, I. (1970) Emotional disturbance and mental retardation: Etiologic and conceptual relationships. In F. J. Menolascino (Ed.), Psychiatric approaches to mental retardation. New York: Basic Books.
- Chess, S. (1970) Emotional problems in mentally retarded children. In F. J. Menolascino (Ed.), *ibid*.
- Chess, S., Korn, S. & Fernandez, P. B. (1971) Psychiatric disorders of children with congenital rubella. New York: Brunner/Mazel.
- Creak, E. M. (1963) Childhood psychosis: A review of 100 cases. Brit. J. Psychiat., 109, 84-89.
- DeSanctis, S. (1906) Supra Alcone Varieta Delia Demenza Precoce. Riv. Sper. Freniat., 32, 141-65.
- Donaldson, J. Y. (1975) Some considerations in the treatment of hyperactive children. Nebraska Med. J., 60, 194-96.
- Eisenberg, L. (1972) Caste, class, and intelligence. In R. F. Murray & P. L. Rossner (Eds.), The genetic, metabolic and developmental aspects of mental retardation. Springfield, HI.: Charles C Thomas.
- Garfield, A., & Shakespeare, R. (1964) A psychological and developmental study of mentally retarded children with cerebral palsy. Develop. Med. Child Neurol., 6, 485-89.
- Gardner, W. L. (1971) Behavior modification in mental retardation. Chicago: Aldine-Atherton.
- Grunwald, K. (1974) International trends in the care of the severely and profoundly retarded and multiply handicapped. In F. J. Menolascino & P. H. Pearson (Eds.), Beyond the limits: Innovations in services for the severely and profoundly retarded. Seattle: Special Child Publications.
- Jervis, G. (1959) The mental deficiencies. In S. Arieti (Ed.), The American handbook of psychiatry. Vol. 1. New York: Basic Books.
- Kanner, L. (1943) Autistic disturbances of affective contact. J. Nerv. Child, 2, 217-50.
- Kanner, L. (1948) Feeble-mindedness: Absolute, relative and apparent. J. Nerv. Child, 7, 363-97.

- Menolascino, F. J. (1965) Psychiatric aspects of mental retardation in children under eight. Amer. J. Orthopsychiat., 35, 852-61.
- Menolascino, F. J. (1967) Psychiatric findings in a sample of institutionalized mongoloids. Brit. J. Ment. Subnorm., 13, 67-74.
- Menolascino, F. J. (1977) Challenges in mental retardation: Progressive ideology and services. New York: Behavioral Publications.
- Menolascino, F. J., & Bernstein, N. R. (1970) Psychiatric assessment of the mentally retarded child. In N. R. Bernstein (Ed.), Diminished people. Boston: Little, Brown and Company.
- Menolascino, F. J., & Eaton, L. (1967) Psychoses of childhood: A five-year follow-up study of experiences in a mental retardation clinic. Amer. J. Ment. Defic., 72, 370-80.
- Murphy, D. L., & Wyatt, R. J. (1972) Reduced monoamine oxidase activity in blood platelets from schizophrenic patients. Nature (London), 238, 225-26.
- Ornitz, E. M., & Ritvo, E. R. (1976) The syndrome of autism: A critical review. Amer. J. Psychiat., 133, 609-21.
- Penrose, L. S. (1966) The contribution of mental deficiency research to psychiatry. Brit. J. Psychiat., 112, 747-55.
- Phillips, I., & Williams, N. (1975) Psychopathology: A study of 100 children. Amer. J. Psychiat., 132, 1265-73.
- Rimland, B. (1964) Infantile autism. New York: Appleton-Century-Crofts.
- Robinson, H. B., & Robinson, N. M. (1965) The mentally retarded child: A psychological approach. New York: McGraw-Hill.
- Rosenblatt, S., Leighton, W. P., & Chanley, J. D. (1973) Dopa-mine-B-hydroxylase: Evidence for increased activity in sympathetic neurons during psychotic states. Science, 182, 923-24.
- Rutter, M. (1965) The influence of organic and emotional factors on the origins, natures, and outcomes of childhood psychosis. Develop. Med. Child Neurol., 7, 518-92.
- Rutter, M., Graham, P., & Yule, W. (1970) A neuropsychiatric study in childhood. Philadelphia: Lippincott.
- Snyder, S. H., Banerjee, S. P., Yamamura, H. I., & Greenberg, D. (1974) Drugs, neurotransmitters and schizophrenia. Science, 184, 1243-53.
- Webster, T. G. (1970) Unique aspects of emotional development

EMOTIONAL DISORDERS

- in mentally retarded children,
cit. In F. J. Menolascino (Ed.,), op.
Wing, J. K. (1966) Epidemiology
of early childhood autism. *Develop. Med. Child Neurol.*, 5,
646-47.
Wise, C. D., & Stein, L. (1973) Dopamine-B-hydroxylase deficits
in the brains of schizophrenic patients. *Science*, 181, 344-47.
Woodward, K. F., Jaffe, N., & Brown, D. (1970) Early psychiatric
intervention for young mentally retarded children. In F. J.
Menolascino (Ed.), op. cit.